REMARKS/ARGUMENTS

Reconsideration and continued examination of the above-identified application are respectfully requested.

At page 2 of the Office Action, the Examiner sets forth a one hundred and eighty five-way restriction requirement as follows:

> I-XVI. Claims 1, 3, 7 and 44, drawn to a peptide having an amino acid sequence of ONE of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, or 17, respectively, a cancer vaccine comprising said peptide, and a pharmaceutical composition thereof.
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> XVII-XXXII. Claims 9, 11, 13, 15, 17, 19, 21, 23, 46, 48, 50, 52, 54, 56, drawn to a polynucleotide encoding a peptide having an amino acid sequence of ONE of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16 or 17, respectively, a hybridizing polynucleotide, a recombinant vector comprising said polynucleotide encoding a peptide, a transformed host cell comprising said recombinant vector and a method for producing a peptide comprising culturing said transformed host cell.
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> XXXIII-XLIX. Claim 25, drawn to an antibody that immunologically recognizes a peptide having an amino acid sequence of ONE of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16 or 17, respectively.
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> L-LXVI. Claim 27, drawn to a method for screening a compound that interacts with a peptide having an amino acid sequence of ONE of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16 or 17 and enhances the recognition property by at least one of HLA-A2402-restricted CTL or HLA-A2-restricted CTL, said method comprising contacting said peptide with said compound.
>
> LXVII-LXXXIII. Claims 29, 31, 33 and 35, drawn to a method for screening a compound that interacts with a polynucleotide encoding a polypeptide having an amino acid sequence of ONE of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, or 17, or with a vector comprising said polynucleotide.
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> LXXXIV-C. Claims 37 and 39, drawn to a method for screening a compound that interacts with a transformed host cell.
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> CI-CXVII. Claim 41, drawn to a method for screening a compound that interacts with a peptide having an amino acid sequence of ONE of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16 or 17, and enhances the recognition property by at least one of HLA-A2402-restricted CTL or HLA-A2-restricted CTL, said method comprising contacting a transformant with a compound.

CXVIII-CXXXIV. Claim 43, drawn to a compound that interacts with a peptide having an amino acid sequence of ONE of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16 or 17, and enhances the recognition property by at least one of HLA-A2402-restricted CTL or HLA-A2-restricted CTL.

CXXXV-CLI. Claims 5, 58, 60, 62, 76, 77, 80, 81, 84 and 85, drawn to a method for inducing CTL or for treating cancer, said method comprising administering to a patient a peptide inducer of CTL, said peptide having an amino acid sequence of ONE of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16 or 17.

CLII-CLXVIII. Claims 64, 66, 68, 70, 88, 89, 92, 93, 96, 97, 100 and 101, drawn to a method for treating cancer, said method comprising administering a pharmaceutical composition comprising a polynucleotide encoding a peptide having an amino add sequence of ONE of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16 or 17, a hybridizing polynucleotide thereof or a recombinant vector comprising said polynucleotide encoding a peptide.

CLXIX-CLXXXV. Claims 72, 74, 104, 105, 108 and 109, drawn to a method for treating cancer, said method comprising administering a pharmaceutical composition comprising a transformant cell comprising a polynucleotide encoding a peptide having an amino add sequence of ONE of SEQ ID NO: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16 or 17.

At page 11 of the Office Action, the Examiner sets forth a species election requirement as follows:

1. If Applicant elects one of the Inventions of Groups I-XVI, Applicant is further required to elect a specific peptide having an amino acid sequence, inducer of CTL and vaccine thereof.

2. If Applicant elects one of the Inventions of Groups XVII-XXXII, Applicant is further required to elect a polynucleotide/vector thereof and host cell thereof encoding a specific peptide having an amino acid sequence.

3. If Applicant elects one of the Inventions of Groups XXXIII-XLIX, Applicant is further required to elect a specific antibody that specifically recognizes a peptide having an amino acid sequence.

4. If Applicant elects one of the Inventions of Groups L-LXVI, Applicant is further required to elect a specific peptide having an amino acid sequence and a specific compound.

5. If Applicant elects one of the Inventions of Groups LXVII-LXXXIII, Applicant is further required to elect a polynucleotide/vector thereof and host cell thereof encoding a specific peptide having an amino acid sequence.

6. If Applicant elects one of the Inventions of Groups LXXXIV-C, Applicant is further required to elect a host cell transformed with a specific polynucleotide/vector encoding a specific peptide having an amino acid sequence.

7. If Applicant elects one of the Inventions of Groups CI-CXVII, Applicant is further required to elect a host cell transformed with a specific polynucleotide/vector encoding a specific peptide having an amino acid sequence.

8. If Applicant elects one of the Inventions of Groups CXVIII-CXXXIV, Applicant is further required to elect a single disclosed species of compound that interacts with a specific peptide having an amino acid sequence.

9. If Applicant elects one of the Inventions of Groups CXXX-CLI, Applicant is further required to elect a specific peptide/inducer/vaccine thereof having an amino acid sequence.

10. If Applicant elects one of the Inventions of Groups CLII-CLXVIII, Applicant is further required to elect a composition comprising a polynucleotide encoding a specific peptide having an amino acid sequence.

11. If Applicant elects one of the Inventions of Groups CLXIX-CLXXXV, Applicant is further required to elect a composition comprising a cell transformed with a polynucleotide vector thereof encoding a specific peptide having an amino acid sequence.

To be responsive, the applicants elect, with traverse, Groups I-XVI, directed to claims 1, 3, 7, and 44 and the species of peptides having an amino acid sequence of SEQ ID NO: 1, an inducer of CTL thereof, a cancer vaccine thereof, and a pharmaceutical composition thereof. Claims 1, 3, 7, and 44 read on this elected invention. Applicants note that in paragraph 29, on page 11 of the Office Action, the Examiner stated the following with respect to an election of species from one of the Inventions of Groups I-XVI: "Applicant is further required to (1) elect a single disclosed species (a specific peptide having an amino acid sequence, inducer of CTL and vaccine thereof, for example, the entire sequence of SEQ ID NO: 1 flanked by ED at the carboxy terminus, an inducer of CTL comprising the entire sequence of SEQ ID NO: 1 flanked by ED at the carboxy terminus, and vaccine comprising the entire sequence of SEQ ID NO: 1 flanked by ED at the carboxy

terminus) to which claims would be restricted if no generic claim is finally held to be allowable and (2) to list all claims readable thereon including those subsequently added." It is unclear whether the Examiner is requiring a further species election in addition to the selection of a specific peptide. First, only claims 1, 3, 7, and 44 are grouped together by the Examiner. These claims are specifically drawn to a peptide, an inducer of CTL thereof, a cancer vaccine thereof, and a pharmaceutical composition thereof. Thus, based on the detailed restriction requirement of a one hundred and eighty five-way restriction and the specific species pertaining to individual peptides, there appears to be no other species needed to be elected. For example, there are no claims that even recite the particulars of the carboxy terminus. Therefore, it appears that only claims 1, 3, 7 and 44 read on the elected invention and species, based on the Examiner's detailed restriction requirement. The applicants are therefore, hopeful that the above election is fully responsive. In the event that the Examiner does not believe it to be fully responsive, the Examiner is respectfully asked to contact the undersigned via telephone.

Additionally, the applicants have not amended the claims to remove non-elected subject matter in order to preserve any appeal/petition options on this restriction requirement.

For the following reasons, the restriction requirement is respectfully traversed.

With regard to the claims, it is respectfully submitted that all claims should be examined at this time since there appears to be no serious burden on the part of the Examiner to search the entire scope of the claims. The sheer number of restricted groups created by the Examiner, 185 groups, alone shows the error in this restriction requirement. Moreover, contrary to the Examiner's comments, unity clearly exists with all claims. The International Search Authority found a single inventive concept by examining all claims. Also, the International Search Authority's ability to search all of the claims clearly shows the lack of burden in searching all claims. The Examiner's

restriction contradicts this previous finding. Further, it is believed that the subject matter has the same concept from the standpoint that the searches would overlap. Under M.P.E.P. § 803, if there is no serious burden in the examination of all of the claims even if the claims are directed to separate inventions, the Examiner must examine all claims at this time. It would appear that § 803 applies to the current situation and therefore the restriction requirement should be withdrawn and all claims should be examined at this time. At a minimum, the Examiner should re-group these non-elected claims upon the allowability of the Groups I-XVI subject matter.

Clearly, any claim that refers to the peptide should easily be encompassed in the present invention for searching purposes, for instance, claims 5, 9, 11, 13, 17, 21, 25, 27, 29, 33, and so on.

Further, at a minimum, applicants strongly believe that SEQ ID NOs: 1-3 should be part of Groups I-XVI and should be examined at this time, for the following reasons.

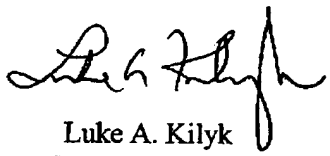
The peptide fragments of SEQ ID NOs: 1-3 are closely related. The common structural feature is that each of the peptides of SEQ ID NOs: 1-3 is a part of the Lck protein. Additionally, all of the peptides of SEQ ID NOs: 1-3 have the HLA-A24 binding motif. See, for example, paragraphs [0059] - [0061] of U.S. Published Patent Application No. US 2002/0128201 A1. The HLA-A24 binding motif is that the second amino acid from the N terminus is Y or F and that the ninth or tenth amino acid from the N terminus is I, M, L, F, or V.

The common function shared between the peptide fragments of SEQ ID NOs: 1-3 is HLA-A24-restricted CTL-inducing ability. See, for example, paragraphs [0063] - [0068] and [0140] - [0144] of U.S. Published Patent Application No. US 2002/0128201 A1. However, other peptides that have the HLA-A24 binding motif may not have this function of CTL-inducing ability. See, for example, paragraphs [0060] and [0061] of U.S. Published Patent Application No. US 2002/0128201 A1.

In addition, SEQ ID NOs: 1 and 2 have a high percent amino acid similarity. SEQ ID NOs: 1 and 2 are closely related and have a common structural feature and a common function as described above. Therefore, SEQ ID NOs: 1 and 2 should, at a minimum, at least be grouped together.

If there are any fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



Luke A. Kilyk
Reg. No. 33,251

Atty. Docket No. 3190-014
KILYK & BOWERSOX, P.L.L.C.
400 Holiday Court, Suite 102
Warrenton, VA 20186
Tel.: (540) 428-1701
Fax: (540) 428-1720